

## New protective undergarment reduces the risk of cancer among firefighters

**In September, the Firefighters' Cancer Fund Foundation presented a study of a new protective undergarment that reduces the risk of occupational cancer diagnoses among firefighters. The study was conducted by Chalmers University of Technology, Lund University, and IVL.**

The number of cancer deaths among individuals under 75 years old is up to three times higher among firefighters compared to the general population, thus posing a significant occupational health problem. The main reason behind the high incidence of cancer among firefighters is that fire smoke contains polycyclic aromatic hydrocarbons (PAH), carcinogenic substances, which penetrate firefighters' standard equipment and are absorbed by the skin. The new protective undergarment is a Swedish innovation of high-tech adsorptive material with activated carbon that binds the dangerous substances in the gas, significantly reducing the exposure of hazardous substances to the skin. In the study, today's standard clothing was also tested, and they reduced PAH to the skin on average by one-fifteenth (1/15) of the total amount of PAH in fire smoke. The new adsorptive undergarment reduced the amount of PAH to less than one-thousandth (1/1000) when new and one-six-hundredth (1/600) after ten smoke dives and intermediate washes.

"As a firefighter and cancer survivor, I am extremely happy with what we have achieved today. I have lost many colleagues to cancer, but hopefully, we will now see a change in that. Now we can distribute the protective undergarment to firefighters across the country, and eventually, I hope it can reach firefighters worldwide. This means that firefighters can continue to save lives without unreasonably high risk of cancer," says Anders Cederberg, Chairman of the Firefighters' Cancer Fund Foundation.

"We have always been convinced of the protective capabilities of the undergarment, but it is important that we now have the protection factor confirmed through scientific tests. We can thus make the protective undergarment available to the market, which in the initial phase is limited to the Nordic region. Large-scale production can begin as early as autumn with the capacity to supply all Swedish firefighters within three to six months," says Thomas Dederer, CEO of CPP Garments.

The product was tested three times at the Guttasjön Fire Department Training Facility outside Borås under the direction of CIT Chalmers in Gothenburg.

For more information, visit [www.cppgarments.com](http://www.cppgarments.com).